

ABSTRACT

A reflector structure in a multi-domain liquid crystal display comprises an active matrix device structure having regions of various height levels, a diffusing layer, and a structure of multi-domain reflective layer. The diffusing layer is formed above the active matrix device structure with multiple extruded bumps of various film thickness and various heights and shapes. The reflector structure has various reflective angles and reflective effects to improve the quality of LCD panel. It can be used in the reflective layer of a reflective or semi-reflective TN, STN, TFT, or TFD. The reflector fabrication process uses conventional process for a metal or an insulation layer on a TFT substrate to form multiple domains within a pixel area. After forming the cell structure of the multi-domain reflective layer, liquid crystal cells form multiple domains within a pixel area.